A landmark with a message.
The start of a new era.

A skyscraper that makes an exclamation mark and enables top performances day after day: with the AutomationCenter, an outstanding building has been developed – one whose architecture communicates company values such as responsibility and vision. But more than that, the AutomationCenter is also a clear commitment by Festo to Germany and the region.

As one of the world’s leading companies in automation technology and the world market leader for technical training and development, Festo once again reflects its own innovative strength with the newly erected landmark in the engineering city of Esslingen. In addition, the AutomationCenter stands for the start of a new era for the company. The 67-metre-high building with the symbolic address ‘Festo Campus 1’ is the first step and the first visible sign of a whole campus landscape. The area for inventors and thinkers stretches as far as the adjoining company headquarters – the TechnologyCenter – and creates the ideal framework for a place that inspires new ideas and brings about innovative technologies. Acting as a nucleus for engineers, the AutomationCenter is a core element of this pulsating environment, whose integral components are research, development and turning customer-specific solutions into reality.

The building’s ultra-modern character and its combination of aesthetics, technology and energy efficiency make Festo’s high standards in terms of quality and progress clear in every detail – and leave no doubt that the future has already begun at Festo.
Top performance that stands out.
Architecture with a force of expression.

With its sophisticated architecture, the AutomationCenter’s dynamics create a combination of economic efficiency, serviceability and functionality – in line with the image of the company. The outer form acts as an expression of inner convictions and underlines the radiant power of the Festo company in the region and beyond.

As a part of its own identity, the AutomationCenter also relates to its surroundings. Just from looking out of the building, its alignment with the Festo TechnologyCenter and integration into the city and region of Esslingen become evident; the striking skyscraper is clearly at home both literally and figuratively. The architecture thus acts as a subtle form of external and internal communication.
The rhombus as the basic shape: aligned with the overall ecological plan and taking the cold airflows into account, the pronounced rhombic shape of the building emerged. Like the needle of a compass, one of the ends points to the adjoining company headquarters. The equal-length sides and the axially symmetric configuration convey balance, whilst the arrangement in a parallelogram shows the openness for new forms. Erected on this are 16 floors that rise skyward, with two more built underground.

Together they result in a nucleus for innovations – a well-conceived work environment for developing outstanding solutions. The clear design language and geometry create the framework for the dynamic development inside.

The holistic concept is revealed with intelligent solutions in its implementation. The building automation covers all areas of the technical infrastructure, heating, ventilation, air conditioning, electrical installations, lighting, shading, access control, safety and energy management. The control system is automatic – for greater convenience and more energy efficiency.
As a rhombus-shaped skyscraper, the AutomationCenter follows its very own laws and rules of engineering. The fine skills of the architect were called on in order to create a building that is not only serviceable but also economical, functional and aesthetic, and which can also withstand the forces of wind in this exposed location.

The building is constructed on just five composite steel supports and two structure cores. This is made possible by using hollow-core floors, which reduce weight by using much less concrete and ensure more space with an increased span width. The four glass lifts in the two ends of the building promise the best views, and there are also three interior lifts – for quickly moving employees and customers, thoughts, plans and ideas.
More than just a facade.
Mirroring the corporate philosophy.

A facade completely made of glass creates transparency. With its crystalline and homogeneous character, the AutomationCenter fits aesthetically into its surroundings. The window frames for the ventilation invoke the corporate colour and achieve a high recognition value. A fascinating aspect of the facade is its adaptability – depending on the time of year and daylight with opened or closed windows, the facade reveals the many facets of its unmistakable character. The LEDs used further add to this effect as a lighthouse – visible from a great distance, the AutomationCenter is an authoritative statement of an innovative company. The first impression of the building thus ingeniously reflects an important part of the corporate philosophy.
In addition to its looks, the facade of the AutomationCenter also impresses with special technical features: dynamic, flow-optimised, pneumatic and with solar energy recovery. Designed as an internally ventilated facade, it achieves the best results with regard to energy efficiency and thus conserves the environment and resources.

The office cooling system follows a simple principle: the internal glare protection, the four-sided aluminium components of the unitised facade and the glazing work together to limit a volume of air which is permanently extracted when exposed to direct sunshine. The heated air is thus not able to reach the offices in the first place, so there is therefore less need to cool them.

In addition, electrochromic glazing ensures reduced light and heat transmittance via weak electrical voltage pulses. The unobstructed view is thus preserved, and natural ventilation is possible at any time, as the windows can be opened manually. Optimal light and climate conditions thus ensure a more pleasant working environment.
Automatically clean and safe.
GEKKO Facade, the vertical high-flyer.

Even for cleaning the ultra-modern glass facade, as a trendsetter, Festo relies on intelligent automation. The GEKKO facade-cleaning robot was developed by Serbot AG and specially tailored to Festo’s needs in partnership with Festo itself. New developments by Festo were integrated: a special brush-positioning system based on the piezo technology developed by Festo; in addition, the cleaning robot’s cover adapted to Festo’s design specifications consistently conveys the specific Festo design language. With its patented drive system and special vacuum feet, the cleaning robot is able to move on the vertical glass surface. The facade maintenance unit adopts the characteristic outline of the building with its movements – the roof trolley, which ensures the power and water supply, is also coordinated with the building’s outline.

In automatic mode, the cleaning robot ensures a consistently high cleaning quality. At the same time, the system increases industrial safety, as the employees responsible for the cleaning process do not have to expose themselves to any hazardous situation. And the cleaning robot also impresses economically: it achieves a cleaning performance of around 400 square metres an hour, which leads to considerable time and cost savings.
Innovation meets sustainability.
Synergy effects that conserve resources.

From the very start, the AutomationCenter was linked with the aim of setting a milestone – both in an architectural respect and with a sustainable energy concept. The perfect coordination of different technologies enables a maximum level of energy efficiency to be achieved, with no need at all for fossil fuels. The finished product was therefore an extraordinary building, where innovative low-temperature energy sources work synergistically together. Besides the sophisticated energy concept for the building, the careful handling of the soil and grassland on the premises also underlines the high standard of sustainability and environmental protection.

Innovation born of conviction and the aesthetics of the architecture combine to create an identity of responsibility – a clear commitment to ecological progress.
More makes the difference.
The combination of top performances.

The strength of the energy concept for the AutomationCenter is in its holistic nature. Grappling with new solutions puts innovative technologies at the centre, which best reinforce their effect when combined. A whole series of passive measures leads to the minimisation of active technology. For example, on large sections, the passive building shell alone takes care of the temperature control, so that there is largely no need to use the active heating system.

In conjunction with a heat pump, natural heating and cooling sources are used: the concrete core activation, the ice storage system and the geothermal energy, which uses earth probes to generate the majority of the heating and cooling energy. One buffer tank each for heat and cold takes the workload off the heat pump.

Other components are the electrochromic glazing and the internally ventilated facade, which was specially developed for Festo and tested for its functionality in field trials. These future-oriented technologies are unique in this combination and thus put to use for the first time at the AutomationCenter.

A comprehensive measuring and monitoring system is integrated in order to carry out a further optimisation of the operating strategies for the system engineering after evaluation. A careful use of resources is therefore ensured over the long term. At the same time, the operational optimisation assures the ideal adjustment to the user needs and ensures that the technical facilities retain their value and increase their lifespan.
New working worlds.
Focusing on people.

Increasing flexibility, enabling interaction, facilitating communication and improving creativity: the AutomationCenter provides the optimal framework conditions and meets the demands of a dynamic work environment. Employees are able to arrange their work environment independently, thanks to adaptable working structures. The results of one of our own project teams have been consistently implemented in order to offer employees in the new working worlds the best-possible support in their daily routine. With a strong and innovative workplace concept, Festo sets new standards as a top employer and allows its employees space for ideas and top performances at the same time – because innovation starts in the mind.
Room for new perspectives.
More communication, more convenience.

New space structures enable new points of view to be taken. In this respect it is noted that the generosity of spatial design picks up simultaneously on the need for retreat in many ways. Open and sectional space, transparency and discretion reveal their contradictory nature and are combined in a harmonious atmosphere that fosters concentration and communication in equal measure and provides room for new ideas and perspectives.

The use of both private and open working areas, as well as meeting rooms and multifunctional counter areas, creates freedom for an individual choice of workspace and for new ways of communicating. Specially developed office furniture contributes to the optimisation of the spatial design, thus creating new free spaces and fulfilling the highest standards of ergonomics and modern media technology.

Noise-absorbing system walls and acoustic elements ensure pleasant room acoustics far removed from a typical open-plan office. The lighting also has a big influence on the atmosphere and people’s well-being in the space; naturally adapted lighting conditions guarantee optimal working conditions.
Level 3 of the AutomationCenter has been designed as a technology and customer centre. Products and expertise are used here to develop ideas and projects together with customers. Festo thus provides a framework for the further development of new solutions together. Moreover, application tests are conducted here, optimisations directly implemented and prototypes built. With one aim: ultimate productivity for the customer.

The so-called shuttle – an installation that demonstrates customer applications – is an innovative way of presenting to the customer the latest Festo technologies and solutions that have already been developed. On this basis, ideas about specific requirements are discussed, developed and optimised to make a solution exclusive to the customer. Festo is thus signalling the importance of customer proximity – and, as a competent partner, offering an exclusive framework for putting ideas into practice.
The history of a vision.
An eye on progress.

Far-sightedness and the art of turning visions into reality have always made the difference at the family company, Festo. With the construction of the AutomationCenter, Festo has managed once again to use the power of progressive thinking and to shape the future in new ways – with an environment that opens up new working worlds and inspires top performance.

As long as three decades ago, expansion measures laid the foundations for a development at the location, which was aimed at continuity, growth and commitment. The decision for the Festo AutomationCenter at the time of the urban development competition in 2006 was a landmark. For the first time, a skyscraper was planned as a company building: a trademark for Festo and a statement visible from afar. Seven years later, the groundbreaking ceremony took place. After the construction work proceeded smoothly, the building was completed in April 2015.

Once again, Festo took responsibility at the forefront of automation technology at the high-technology location of Esslingen. In doing so, Festo sends out a visible sign to the region and at the same time provides the impetus for further growth at the company.
Structure
- Building height: 67 m
- Floors above ground: 16, floors below ground: 2
- Area: 12,000 m²
- Total length (incl. existing underpass): 101 m
- Total length of new building (extension): 70.50 m
- Structural steel used: 3,095 t, concrete installed: 13,760 m³
- Workplaces: approx. 400
- Excavated material: 30,000 m³, installed

Supporting-structure concept
- Attic (end partition to cover the roof): 420 m above sea level
- Ceilings: hollow body ~50 cm, raised floor ~40 cm; approx. 11 m span
- Integrated in ceilings: ventilation and installations, sprinklers
- Supporting structure: reinforced-concrete skeleton construction, flat ceilings, supports, stiffening cores
- Supports: 5
- Building cores: 2, vertical

1,300 m³ capacity ice storage system
400 workstations
16 floors
8,500 m² facade area
Energy concept

- Ice storage system 1,300 m³ contents
- Heating and cooling supply: two reversible heat pumps
- Heat and cold transfer: water-based component activation (summer)
- Geothermal energy: 49 geothermal probes, 2,940 m total length, water content: 1,000 litres (without glycol due to water protection)
- Fresh-air supply: ventilation system with heat recovery and supply-air humidification
- Adiabatic exhaust air cooling: cools the supply air without using electricity
- Supply from source-air outlets in raised floor
- Sprinkler tanks (peak load buffer)

Facade

- Area: 8,500 m²
- Triple glazing; U value: 1.3 W/m²
- Total energy transmission (summer): min. 20%
- Individually controllable and user-independent glare protection blinds

12,000 m²
area

67 m
building height

3,095 t
structural steel used